SEQUENCE LISTING

<110> Hartley, James L.

Brasch, Michael A.

Temple, Gary F.

Fox, Donna K.

<120> Recombinational Cloning Using Nucleic Acids Having Recombination Sites

<130> 0942.2850004

<140>

<141>

<150> US 60/065,930

<151> 1997-10-24

<160> 60

<170> PatentIn Ver. 2.0

<210> 1

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination products

<400> 1

rkycwgcttt yktrtacnaa stsgb

25

<210> 2

<211> 25

<212> DNA

<213> Unknown

<290

<223> Description of Unknown Organism: recombination

products <400> 2 agccwgcttt yktrtacnaa ctsgb 25 <210> 3 <211> 25 <212> DNA <213> Unknown <220> <223> Description of Unknown Organism: recombination products <400> 3 gttcagcttt cktrtacnaa ctsgb 25 <210> 4 <211> 25 <212> DNA <213> Unknown <220> <223> Description of Unknown Organism: recombination products <400> 4 agccwgcttt cktrtacnaa gtsgb 25 <210> 5 <211> 25 <212> DNA <213> Unknown <220> <223> Description of Unknown Organism: recombination products <400> 5 gttcagcttt yktrtacnaa gtsgb

25

<210>	6	
<211>	25	
<212>	DNA	
<213>	Unknown	
<220>		
<223>	Description of Unknown Organism: recombination	
	products	
<400>	6	
agcct	gcttt tttgtacaaa cttgt	25
<210>		
<211>		
<212>		
<213>	Unknown	
<220×		
<220>	December of Helman of	
\ 2232	Description of Unknown Organism: recombination	
	products	
<400>	7	
	ycttt cttgtacaaa cttgt	25
		۷.
<210>	8	
<211>	25	
<212>	DNA	
<213>	Unknown	
<220>		
<223>	Description of Unknown Organism: recombination	
	products	
<400>	8	
acccag	gettt ettgtacaaa gtggt	25
.010		
<210>		
<211>		
<212>		
<213>	Unknown	•

<220>		
<223>	Description of Unknown Organism: recombination	
	products	
<400>	9	
gttca	gcttt tttgtacaaa cttgt	25
<210>	10	
<211>	25	
<212>	AND	
<213>	Unknown	
<220>		
<223>	Description of Unknown Organism: recombination	
	products	
<400>		
gttca	gcttt cttgtacaaa cttgt	25
<210>		
<211>		
<212>		
<213>	Unknown	
<220>		
<223>	Description of Unknown Organism: recombination	
	products	
4400		
<400>		
gttca	gcttt cttgtacaaa gtggt	25
<210>	12	
<211>		
<212>		
	Unknown	
\L_1J/	OHAHOWH	
<220>		
	Description of Unknown Organism: recombination	
.2237	products	
	F1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
<400>	12	

agcctgcttt tttgtacaaa gttgg	25
<210> 13	
<211> 25	
<212> DNA	
<213> Unknown	
(220)	
<220>	
<223> Description of Unknown Organism: recombination products	
<400> 13	
agectgettt ettgtacaaa gttgg	25
<210> 14	
<211> 25	
<212> DNA	
<213> Unknown	
<220>	
<223> Description of Unknown Organism: recombination products	
products	
<400> 14	
acccagcttt cttgtacaaa gttgg	25
<210> 15	
<211> 25	
<212> DNA	
<213> Unknown	
<220>	
<223> Description of Unknown Organism: recombination	
products	
<400> 15	
gttcagcttt tttgtacaaa gttgg	25
<210> 16	
<211> 25	
<212 DNA	

<213>	Unknown	
<220>		
	Description of Unknown Organism: recombination	
12201	products	
<400>	16	
gttcag	gcttt cttgtacaaa gttgg	25
<210>	17	
<211>	39	
<212>	DNA	
<213>	Unknown	
<220>		
<223>	Description of Unknown Organism: recombination	
	products	
<400>		
ccacc	acaaa cgcgtccatg gaattacact ttaatttag	39
<210>		
<211>		
<212>		
<213>	Unknown	
<220>		
<223>	Description of Unknown Organism: recombination	
	products	
- 400>	10	
<400>		39
ccacc	acaag togacgcatg cogacagoot tocaaatgt	55
<210>	1 9	
<211>		
<212>		
	Artificial Sequence	
-210/		
<220>		
_	Description of Artificial Sequence: synthetic	
/	oligopuoleetide	

<400> 19	
ggccgattac gatatcccaa cgaccgaaaa cctgtatttt cagggt	46
<210> 20	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<pre><220> <223> Description of Artificial Sequence: synthetic</pre>	
oligonucleotide	
	O
<400> 20	
caggttttcg gtcgttggga tatcgtaatc	30
<210> 21	
<211> 47	
<212> DNA	
<213> Artificial Sequence	
<220>	
<pre><223> Description of Artificial Sequence: synthetic</pre>	
oligonucleotide	
<400> 21	4.7
ggccagatta cgatatccca acgaccgaaa acctgtattt tcagggt	47
<210> 22	
<211> 31	
<212> DNA ·	
<213> Artificial Sequence	
-	
<220>	
<223> Description of Artificial Sequence: synthetic	
oligonucleotide	
<400> 22	
caggttttcg gtcgttggga tatcgtaatc t	31
(010) 02	
<210> 23	

<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence: synthetic	
	oligonucleotide	
<400>	23	
ggccaa	agatt acgatatccc aacgaccgaa aacctgtatt ttcagggt	48
<210>	24	
<211>	32	
<212>	DNA	
<213>	Artificial Sequence	
<220>	·	
<223>	Description of Artificial Sequence: synthetic	
	oligonucleotide	
<400>	24	
caggtt	etteg gtegttggga tategtaate tt	32
<210>	25	
<211>		
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence: synthetic oligonucleotide	
	01190	
<400>	25	
	tacg tggac	15
<210>	26	
<211>		
<212>		
	Artificial Sequence	
<220>		
	Description of Artificial Sequence: synthetic	
1445/	oligonucleotido	

<400> 26	
tcgagtccac gtaaacggtt cccacttatt a	31
<210> 27	
<211> 39	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: synthetic oligonucleotide	
<400> 27	
uauuuucagg guatggagaa aaaaatcact ggatatacc	39
v010v 00	
<210> 28	
<211> 33	
<212> DNA	
<213> Artificial Sequence	
<220>	
<pre><223> Description of Artificial Sequence: synthetic</pre>	
oligonucleotide	
<400> 28	
ucccacuuau uacgccccgc cctgccactc atc	33
<210> 29	
<211> 33	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: synthetic	
oligonucleotide	
<400> 29	
uauuuucagg guatgeetgt tetggaaaac egg	33
<210> 30	

<220>

```
<211> 34
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: synthetic
      oligonucleotide
<400> 30
ucccacuuau uatttcagcc ccagggcggc tttc
                                                                    34
<210> 31
<211> 58
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: synthetic
      oligonucleotide
<400> 31
tccgttgaag cctgcttttt tatactaact tgagcgaagc ctcggggtca gcataagg
<210> 32
<211> 58
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: synthetic
      oligonucleotide
<400> 32
ccaataactt cgtatagcat acattatacg aagttattgc cccttggtga catactcg
<210> 33
<211> 20
<212> DNA
<213> Artificial Sequence
```

<223>	Description of Artificial Sequence: synthetic oligonucleotide	
<400>	33	
tcact	agtcg gcggcccaca	20
<210>	34	
<211>		
<212>		
	Artificial Sequence	
	•	
<220>		
<223>	Description of Artificial Sequence: synthetic oligonucleotide	
<400>	34	
gagcgg	gccc cgcggaccac	20
<210>		
<211>	21	
<212>		
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence: synthetic oligonucleotide	
<400>	35	
ggccca	caag tttgtacaaa a	21
		2.1
<210>	36	
<211>	20	
(212>	DNA	
(213> .	Artificial Sequence	
220>		
(223>	Description of Artificial Sequence: synthetic oligonucleotide	
.400		

ccccg	cggac cactttgtac	20
<210>	37	
<211>	21	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence: synthetic oligonucleotide	
<400>	37	
acaagt	ttgt acaaaaagc a	21
<210>	38	
<211>	21	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence: synthetic oligonucleotide	
<400>	38	
accact	ttgt acaagaaagc t	21
<210>	39	
<211>	25	
<212>	DNA	
<213>	Unknown	
<220>		
	Description of Unknown Organism: recombination products	
<400>	39	
rbycwg	cttt yttrtacwaa stkgd	25
<210>	40	
<211>	25	
<212×	DNA	

<213>	Unknown	
<220>		
<223>	Description of Unknown Organism: recombination products	
<400>	40	
asccwo	gcttt yttrtacwaa stkgw	25
<210>	41	
<211>	25	
<212>	DNA	
<213>	Unknown	
<220>		
<223>	Description of Unknown Organism: recombination products	
<400>	41	
asccwo	gcttt yttrtacwaa gttgg	25
<210>	42	
<211>	25	
<212>	DNA	
<213>	Unknown	
<220>		
	Description of Unknown Organism: recombination products	
<400>	42	
gttcag	cttt yttrtacwaa stkgw	25
<210>	43	
<211>	25	
<212>	DNA	
<213>	Unknown	
<220>		
	Description of Unknown Organism: recombination	

<400> 43	
gttcagcttt yttrtacwaa gttgg	25
<210> 44	
<211> 25	
<212> DNA	
<213> Unknown	
<220>	
<223> Description of Unknown Organism: recombination products	
<400> 44	
tcggacgaaa aaatatgatt gaact	25
<210> 45	
<211> 25	
<212> DNA	
<213> Unknown	
<220>	
<223> Description of Unknown Organism: recombination products	
<400> 45	
tcggacgaaa aaacatgttt gaaca	25
<210> 46	
<211> 25	
<212> DNA	
<213> Unknown	
<220>	
<223> Description of Unknown Organism: recombination products	
<400> 46	
tcggacgaaa gaacatgttt gaaca	25
<210 \ 47	

<211	> 25	
<212	> DNA	
<213	> Unknown	
<220	>	
<223	Description of Unknown Organism: recombination	
	products	
<400>		
tgggt	cgaaa gaacatgttt cacca	25
<210>		
<211>		
<212>	1	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence: synthetic oligonucleotide	
	orracie of the	
<400>	40	
aattt	tcatg tttgacagct tatc	24
<210>	49	
<211>		
<212>		
	Artificial Sequence	
<220>		
	Description of Artificial a	
12207	Description of Artificial Sequence: synthetic oligonucleotide	
<400>	49	
cgatgg	atat gttctgccaa g	21
		-
<210>		
<211>		
<212>		
<213>	Artificial Sequence	

<220>	
<223> Description of Artificial Sequence: synthetic oligonucleotide	
<400> 50	
acaagtttgt acaaaaaagc aggctaattc tcatgtttga cagcttatc	49
<210> 51	
<211> 46	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: synthetic oligonucleotide	
<400> 51	
accactttgt acaagaaagc tgggtcgatg gatatgttct gccaag	46
<210> 52	
<211> 53	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: synthetic oligonucleotide	
<400> 52	
ggggacaagt ttgtacaaaa aagcaggcta attctcatgt ttgacagctt atc	53
<210> 53	
<211> 50	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: synthetic oligonucleotide	
<400> 53	
ggggaccact ttgtacaaga aagctgggtc gatggatatg ttctgccaag	50

<210>	> 54	
<211>	· 23	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence: synthetic oligonucleotide	
<400>	54	
aatac	attca aatatgtatc cgc	23
<210>	55	
<211>	22	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence: synthetic oligonucleotide	
<400>	55	
ttacca	aatgc ttaatcagtg ag	22
<210>	56	
<211>	48	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
	Description of Artificial Sequence: synthetic	
	oligonucleotide	
<400>	56	
acaagt	ttgt acaaaaaagc aggctaatac attcaaatat gtatccgc	48
<210> !	57	
<211>	47	
/212\ I	OND	

	-18-	
<213	> Artificial Sequence	
<220	>	
<223	<pre>> Description of Artificial Sequence: synthetic oligonucleotide</pre>	
<400	> 57	
accad	ctttgt acaagaaagc tgggtttacc aatgcttaat cagtgag	47
<210	> 58	
<2112	> 52	
<212>	> DNA	
<213>	Artificial Sequence	
<220>	•	
<223>	Description of Artificial Sequence: synthetic oligonucleotide	
<400>	58	
gggga	caagt ttgtacaaaa aagcaggcta atacattcaa atatgtatcc gc	52
<210>	59	
<211>	51	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence: synthetic oligonucleotide	
<400>	59	
gggga	ccact ttgtacaaga aagctgggtt taccaatgct taatcagtga g	51
<210>	60	
<211>	25	
<212>	DNA	
<213>	Unknown	
<220>		
<223>	Description of Unknown Organism: recombination	

products

<400> 60 agcctgcttt tttatactaa cttga

25